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### Short Report

## Suicide in people over 65 years of age in the Australian Capital Territory

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#### ABSTRACT

Suicide by hanging is not an uncommon event in people over the age of 65 years in the Australian Capital Territory. We will review the incidence of suicide over the last seven years, as well as discuss the characteristics of suicide in elderly people. Knowledge of local suicide patterns enables the forensic medical officer to recognise deaths that may be unexpected or unusual.

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## 1. Background

The Australian Capital Territory covers 2360 square kilometres and is the smallest of Australia's six states and two territories. The ACT is 300 km south–west of Sydney and home to approximately 400,000 people of whom approximately 9% are over 65 years of age. This review will present the characteristics of suicide in people over the age of 65 years in Australian Capital Territory from July 2000 to April 2007.

### 2. Discussion

Understanding the epidemiology of suicide in a community forms part of the interpretation of suicidal deaths. This allows a forensic medical officer to recognise when deaths do not fit the usual pattern seen within a community.

The epidemiology of suicide in the elderly is unique to each cultural context, both in the number of deaths as well as the method that is most commonly used.<sup>2</sup> It is thought that some suicides in the elderly are given an alternative explanation due to cultural issues (such as family shame, burial rights etc.) or non-recognition, such as 'passive' suicide, when an individual dies from self-starvation or deliberately not following medical advice.<sup>3</sup>

The following chart displays the ages of suicide victims in the ACT from July 2000 to April 2007 (Fig. 1). The information for this chart comes from the National Coroner's Information System

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(NCIS) using a search query of "intentional self harm". The NCIS is a database and data retrieval system of all coronial cases reported across Australia since July 2000. It is administered by a specialised team in Melbourne at the Victorian Institute of Forensic Medicine. The data is as complete as possible, but will not include deaths that have not been concluded in the coronial system. Also suicidal deaths that are not reported as "intentional self harm" by the Coroner will not be retrieved by the database.

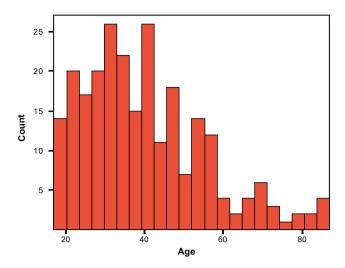
Clearly the number of people dying from suicide is higher in the younger age groups. However there are still a significant number of people over the age of 65 whose mechanism of death is given as intentional self harm.

Using NCIS data we are able to determine the most commonly used method of suicide in people over the age of 65 in the ACT as shown in the following table (Fig. 2).

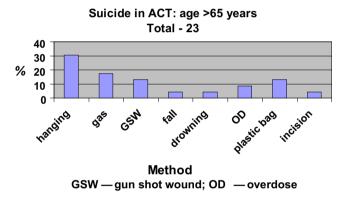
Hanging was the most common method used by people over 65 with just over 30% of the 23 deaths due to hanging. In the United States, guns play a much bigger role in suicidal deaths, with up to 80% of suicides in elderly people due to gun shot wounds.<sup>4</sup> In rural areas of Australia, gun shot wounds play a greater role in suicidal deaths probably due to higher rate of gun ownership.<sup>3,5</sup>

In a study of worldwide data, the ratio of episodes of self harm to suicide varies greatly in different age groups. In the general population there are 8–15 episodes of deliberate self harm to every suicide, whereas in the younger population there are up to 200 cases of self harm to every suicide. In the elderly the ratio is 4:1, probably due to the more lethal methods selected by elderly people, and possibly reflects the intensity of the intent of elderly people. Hanging is a highly successful mode of suicide. It is estimated that 70% of attempted hangings result in death. Due to the

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**Fig. 1.** Number of deaths from suicide versus age in the ACT from July 2000 – April 2007 (NCIS data).



**Fig. 2.** Number of suicides (%) versus method in people over 65 years in the ACT from July 2000 – April 2007.

mechanics of hanging, once a person has initiated the process, any "change of heart" may not be possible.

The risk factors for suicide in elderly people are similar to those in other age groups and include:

- Chronic illness especially painful or terminal illnesses
- Unmarried
- Depression especially when associated with bereavement or hopelessness
- Substance abuse
- Past attempt<sup>4,6,8</sup>

In an English study it was found that many elderly people had contact with their family doctor in the months before their suicide. However most presented with physical symptoms and very few had mental health problems identified during the consultation. Medical staff may not recognise suicidality in elderly patients. In a 1997 Australian study, medical students did not think that suicide was a problem in the elderly as they considered it an uncommon phenomenon. 9

### 3. Summary

Suicide by hanging is not an uncommon mechanism of death in people over the age of 65 years in the Australian Capital Territory. Forensic medical officers should be aware of common suicide methods in different age groups so they are able to identify unexpected or unusual deaths. Prevention of suicide in the elderly must focus on the treatment of depression, minimising social isolation and increasing medical staff and community awareness.

#### Conflict of interest statement

This review formed part of ES's study towards a Master of Forensic Medicine. This study is supported by the FAMSAC (Forensic and Medical Sexual Assault Care, ACT) educational fund.

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